

submits that the embodiments of the present invention as recited in Claims 1, 5-7, and 14 are not rendered obvious in view of Hashimoto and Taniguchi in view of the following arguments.

Applicant respectfully states that the amended Independent Claim 1 includes the limitation “wherein said dummy pixels allow light to pass through to improve contrast of edge-displayed images of said matrix.” This limitation is supported in the specification in numerous places including page 23 lines 11-13. This limitation is not taught or rendered obvious in view of Hashimoto and Taniguchi.

Applicant agrees with the rejection that Hashimoto does not disclose the dummy pixels allowing light to pass through to improve contrast of edge-displayed images. However, Applicant disagrees that Taniguchi does disclose the dummy pixels allowing light to pass through to improve contrast of edge-displayed images. As the rejection states, Taniguchi teaches independently controlling elements of the non-display region, from those in the effective display region, to make the non-display region light or dark. That is, Taniguchi does not teach the use of dummy pixels at all but rather teaches the use of controllable pixels.

Applicant respectfully points out that the Independent Claim 1 includes the limitation of a dummy pixel. In the Specification of the present Application, specifically pages 16-17, 18, and 20, a dummy pixel is clearly described. For example, on page 16 starting at line 26, “the pixels of the border region 312 are called “dummy” pixels because they do not have a controllable element

therein”(emphasis added). Therefore, Applicant respectfully states that the dummy pixels of Claim 1 are not obvious in view of Taniguchi since Taniguchi explicitly discloses independently controlling picture elements of the non-display region which actually teaches away from the claimed dummy pixel that does not have a controllable element therein and cannot be independently controlled. Applicant respectfully states that Taniguchi teaches away from the use of dummy pixels as claimed in the present application and instead teaches toward a controllable pixel configuration quite unlike the claimed embodiments. Therefore, Applicant respectfully states that Taniguchi does not teach nor render obvious a dummy pixel since Taniguchi teaches controllable pixels.

Additionally, by using dummy pixels having no controllable elements therein the circuitry and manufacturing processes of the present application are reduced as is the power consumption of the display unit. Therefore, Applicant respectfully states that Hashimoto in view of Taniguchi do not teach or render obvious or appreciate the problems addressed by the limitations of Independent Claim 1.

Thus, Applicant respectfully submits that the rejection of Independent Claim 1 under 35 U.S.C. § 103(a) has been overcome, and that Independent Claim 1 is in condition for allowance. Additionally, Claims 2-7 are dependent on Independent Claim 1. Accordingly, Applicant also respectfully submits that the rejection of Claims 2-7 under 35 U.S.C. § 103(a) has been overcome, as these claims are dependent on allowable base claims and recite additional limitations.

Claims 2, 3, 8-10, 12, 13, and 15-20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Hashimoto (5,784,132), Taniguchi (4,824,212) and further in view of Hill et al. (6,577,291 B2). Applicant has reviewed Hashimoto and Taniguchi in view of Hill et al., and respectfully submits that the embodiments of the present invention as recited in Claims 2, 3, 8-10, 12, 13, and 15-20 are not obvious in view of Hashimoto, Taniguchi and Hill et al., alone or in combination.

Applicant respectfully states that the amended Independent Claims 8 and 15 include the limitation "wherein said dummy pixels allow light to pass through to improve contrast of edge-displayed images of said matrix." This limitation is supported in the specification in numerous places including page 23 lines 11-13. This limitation is not taught or rendered obvious in view of Hashimoto, Taniguchi and Hill et al., alone or in combination.

Applicant agrees with the rejection that Hashimoto does not disclose the dummy pixels allowing light to pass through to improve contrast of edge-displayed images. However, Applicant disagrees that Taniguchi does disclose the dummy pixels allowing light to pass through to improve contrast of edge-displayed images. As the rejection states, Taniguchi teaches independently controlling elements of the non-display region, from those in the effective display region, to make the non-display region light or dark. That is, Taniguchi does not teach the use of dummy pixels at all but rather teaches the use of controllable pixels.

Applicant respectfully points out that the Independent Claims 8 and 15 feature a dummy pixel. In the Specification of the present Application, specifically pages 16-17, 18, and 20, a dummy pixel is clearly described. For example, on page 16 starting at line 26, "the pixels of the border region 312 are called "dummy" pixels because they do not have a controllable element therein"(emphasis added). Therefore, Applicant respectfully states that the dummy pixels of Claims 8 and 15 are not obvious in view of Taniguchi since Taniguchi explicitly discloses independently controlling picture elements of the non-display region which actually teaches away from the claimed dummy pixel that does not have a controllable element therein and cannot be independently controlled. Applicant respectfully states that Taniguchi teaches away from the use of dummy pixels as claimed in the present application and instead teaches toward a controllable pixel configuration quite unlike the claimed embodiments. Therefore, Applicant respectfully states that Taniguchi does not teach nor render obvious a dummy pixel since Taniguchi teaches controllable pixels.

Additionally, by using dummy pixels having no controllable elements therein the circuitry and manufacturing processes of the present application are reduced as is the power consumption of the display unit. Applicant further states that the features of Claims 8 and 15 are not taught or rendered obvious in view of Hill et al. Therefore, Applicant respectfully states that neither Hashimoto, Taniguchi nor Hill et al. teach or render obvious or appreciate the problems addressed by the limitations of Independent Claims 8 and 15. Furthermore, Applicant respectfully states the combination of Hill et al. and Hashimoto, and Taniguchi does not teach or make obvious the limitations of Independent Claims 8 and 15.

Thus, Applicant respectfully submits that the rejection of Independent Claims 8 and 15 under 35 U.S.C. § 103(a) has been overcome, and that Independent Claims 8 and 15 are in condition for allowance. Additionally, Claims 10-14 are dependent on Independent Claim 8, and Claims 16-20 are dependent on Independent Claim 15. Accordingly, Applicant also respectfully submits that the rejection of Claims 10-14 and Claims 16-20 under 35 U.S.C. § 103(a) has been overcome, as these claims are dependent on allowable base claims and recite additional limitations.

CONCLUSION

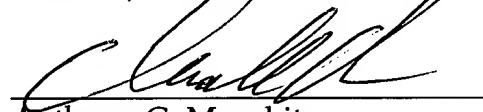
In light of the above remarks, Applicant respectfully requests reconsideration of the rejected Claims.

Based on the amendments and arguments presented above, Applicant respectfully asserts that Claims 1-20 overcome the rejections of record and, therefore, Applicant respectfully solicits allowance of these Claims.

The Examiner is invited to contact Applicant's undersigned representative if the Examiner believes such action would expedite resolution of the present Application.

Respectfully submitted,

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